



8

SEQUENCE LISTING

<110> Boyle, Brian J
Mize, Nancy K
Arterburn, Matthew C
Yeung, George
Tang, Y. Tom
Liu, Chenghua
Drmanac, Radoje T
Wang, Menq-Yun
Chen, Lichuan
Yang, Yea-Huey

<120> METHODS AND MATERIALS RELATING TO METALLOCARBOXYPEPTIDASE-LIKE
POLYPEPTIDES AND POLYNUCLEOTIDES

<130> HYS-28

<140> 09/676,135

<141> 2000-09-29

<150> US 09/560,875

<151> 2000-04-27

<150> US 09/496,914

<151> 2000-02-03

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<170> PatentIn version 3.0

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<212> DNA

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ggaaatcccg ttcaccccat aataatggca catgttttgg gacggatctc aatcgaaatt	360
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gaattcacgc cagagaatgg attgctcctg ctttttgcca atggttcgtc aaagaaattc	180
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ggacagggcc	agtgtctgaa	ccagagacta	aagctgttgc	cagcttcata	gagagcaaga	480
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              1              5

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Leu Tyr Leu Leu Gly Met Leu Val Pro Gly Gly Leu Gly Tyr Asp Arg
10 15 20

tcc tta gcc caa cac aga caa gag att gtg gac aag tca gtg agt cca 210
Ser Leu Ala Gln His Arg Gln Glu Ile Val Asp Lys Ser Val Ser Pro
25 30 35

tgg agc ctg gag acg tat tcc tat aac ata tac cac ccc atg gga gag 258
Trp Ser Leu Glu Thr Tyr Ser Tyr Asn Ile Tyr His Pro Met Gly Glu
40 45 50 55

atc tat gag tgg atg aga gag atc agt gag aag tac aag gaa gtg gtg 306
Ile Tyr Glu Trp Met Arg Glu Ile Ser Glu Lys Tyr Lys Glu Val Val
60 65 70

aca cag cat ttc cta gga gtg acc tat gag acc cac ccc ata tat tat 354
Thr Gln His Phe Leu Gly Val Thr Tyr Glu Thr His Pro Ile Tyr Tyr
75 80 85

ctg aag atc agc caa cca tct ggt aat ccc aag aaa atc att tgg atg 402
Leu Lys Ile Ser Gln Pro Ser Gly Asn Pro Lys Lys Ile Ile Trp Met

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cgc aag ctc ctt agg aac ctg gac ttc tat gtc ctt cca gtt ctt aac Arg Lys Leu Leu Arg Asn Leu Asp Phe Tyr Val Leu Pro Val Leu Asn 140 145 150			546
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Pro Thr Cys Glu Glu Thr Met Glu Ala Val Leu Ser Val Leu Asp Asp			
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Val Tyr Ala Lys His Trp His Ser Asp Ser Ala Gly Arg Val Thr Ser			
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gcc act atg ctg ctg ggc ctg ctg gtg tcc tgc atg tct ctt ctc taa			1218
Ala Thr Met Leu Leu Gly Leu Leu Val Ser Cys Met Ser Leu Leu			
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<211> 374

<212> PRT

<213> homo sapiens

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Val Asp Lys Ser Val Ser Pro Trp Ser Leu Glu Thr Tyr Ser Tyr Asn	
35 40 45	
Ile Tyr His Pro Met Gly Glu Ile Tyr Glu Trp Met Arg Glu Ile Ser	
50 55 60	
Glu Lys Tyr Lys Glu Val Val Thr Gln His Phe Leu Gly Val Thr Tyr	
65 70 75 80	
Glu Thr His Pro Ile Tyr Tyr Leu Lys Ile Ser Gln Pro Ser Gly Asn	
85 90 95	

Pro Lys Lys Ile Ile Trp Met Asp Cys Gly Ile His Ala Arg Glu Trp
100 105 110

Ile Ala Pro Ala Phe Cys Gln Trp Phe Val Lys Glu Ile Leu Gln Asn
115 120 125

His Lys Asp Asn Ser Arg Ile Arg Lys Leu Leu Arg Asn Leu Asp Phe
130 135 140

Tyr Val Leu Pro Val Leu Asn Ile Asp Gly Tyr Ile Tyr Thr Trp Thr
145 150 155 160

Thr Asp Arg Leu Trp Arg Lys Ser Arg Ser Pro His Asn Asn Gly Thr
165 170 175

Cys Phe Gly Thr Asp Leu Asn Arg Asn Phe Asn Ala Ser Trp Cys Ser
180 185 190

Ile Gly Ala Ser Arg Asn Cys Gln Asp Gln Thr Phe Cys Gly Thr Gly
195 200 205

Pro Val Ser Glu Pro Glu Thr Lys Ala Val Ala Ser Phe Ile Glu Ser
210 215 220

Lys Lys Asp Asp Ile Leu Cys Phe Leu Thr Met His Ser Tyr Gly Gln
225 230 235 240

Leu Ile Leu Thr Pro Tyr Gly Tyr Thr Lys Asn Lys Ser Ser Asn His
245 250 255

Pro Glu Met Ile Gln Val Gly Gln Lys Ala Ala Asn Ala Leu Lys Ala
260 265 270

Lys Tyr Gly Thr Asn Tyr Arg Val Gly Ser Ser Ala Asp Ile Leu Tyr
275 280 285

Ala Ser Ser Gly Ser Ser Arg Asp Trp Ala Arg Asp Ile Gly Ile Pro
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Phe Ser Tyr Thr Phe Glu Leu Arg Asp Ser Gly Thr Tyr Gly Phe Val
305 310 315 320

Leu Pro Glu Ala Gln Ile Gln Pro Thr Cys Glu Glu Thr Met Glu Ala
 325 330 335

Val Leu Ser Val Leu Asp Asp Val Tyr Ala Lys His Trp His Ser Asp
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Ser Cys Met Ser Leu Leu
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 ctgccagaag ctcagatcca gcccacctgt gaggagacca tggaggctgt gctgtcagtc 1020
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<212> PRT

<213> homo sapiens

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Tyr	Val	Leu	Pro	Val	Leu	Asn	Ile	Asp	Gly	Tyr	Ile	Tyr	Thr	Trp	Thr
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Thr	Asp	Arg	Leu	Trp	Arg	Lys	Ser	Arg							
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<212> PRT

<213> homo sapiens

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<211> 41

<212> PRT

<213> homo sapiens

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1 5 10 15

Lys Tyr Lys Glu Val Val Thr Gln His Phe Leu Gly Val Thr Tyr Glu
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Thr His Pro Ile Tyr Tyr Leu Lys Ile
35 40

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<211> 22

<212> PRT

<213> homo sapiens

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Thr Pro Tyr Gly Tyr Thr
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<211> 15

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<213> homo sapiens

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<211> 27

<212> PRT

<213> homo sapiens

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<211> 14

<212> PRT

<213> homo sapiens

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Leu Thr Met His Ser Tyr Gly Gln Leu Ile Leu Thr Pro Tyr
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<212> PRT

<213> homo sapiens

<400> 14

Gly Thr Asp Leu Asn Arg Asn Phe Asn
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<212> PRT

<213> homo sapiens

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Ile Gly

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<212> PRT

<213> homo sapiens

<400> 16

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Gly Gly Leu Gly
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<210> 17

<211> 15

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<213> homo sapiens

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Ala Thr Met Leu Leu Gly Leu Leu Val Ser Cys Met Ser Leu Leu
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<210> 18

<211> 354

<212> PRT

<213> homo sapiens

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20 25 30
Met Gly Glu Ile Tyr Glu Trp Met Arg Glu Ile Ser Glu Lys Tyr Lys
35 40 45
Glu Val Val Thr Gln His Phe Leu Gly Val Thr Tyr Glu Thr His Pro
50 55 60
Ile Tyr Tyr Leu Lys Ile Ser Gln Pro Ser Gly Asn Pro Lys Lys Ile
65 70 75 80
Ile Trp Met Asp Cys Gly Ile His Ala Arg Glu Trp Ile Ala Pro Ala
85 90 95
Phe Cys Gln Trp Phe Val Lys Glu Ile Leu Gln Asn His Lys Asp Asn
100 105 110
Ser Arg Ile Arg Lys Leu Leu Arg Asn Leu Asp Phe Tyr Val Leu Pro
115 120 125
Val Leu Asn Ile Asp Gly Tyr Ile Tyr Thr Trp Thr Thr Asp Arg Leu
130 135 140
Trp Arg Lys Ser Arg Ser Pro His Asn Asn Gly Thr Cys Phe Gly Thr
145 150 155 160
Asp Leu Asn Arg Asn Phe Asn Ala Ser Trp Cys Ser Ile Gly Ala Ser
165 170 175
Arg Asn Cys Gln Asp Gln Thr Phe Cys Gly Thr Gly Pro Val Ser Glu
180 185 190
Pro Glu Thr Lys Ala Val Ala Ser Phe Ile Glu Ser Lys Lys Asp Asp
195 200 205
Ile Leu Cys Phe Leu Thr Met His Ser Tyr Gly Gln Leu Ile Leu Thr
210 215 220
Pro Tyr Gly Tyr Thr Lys Asn Lys Ser Ser Asn His Pro Glu Met Ile
225 230 235 240
Gln Val Gly Gln Lys Ala Ala Asn Ala Leu Lys Ala Lys Tyr Gly Thr
245 250 255
Asn Tyr Arg Val Gly Ser Ser Ala Asp Ile Leu Tyr Ala Ser Ser Gly
260 265 270
Ser Ser Arg Asp Trp Ala Arg Asp Ile Gly Ile Pro Phe Ser Tyr Thr
275 280 285

Phe Glu Leu Arg Asp Ser Gly Thr Tyr Gly Phe Val Leu Pro Glu Ala
 290 295 300

Gln Ile Gln Pro Thr Cys Glu Glu Thr Met Glu Ala Val Leu Ser Val
 305 310 315 320

Leu Asp Asp Val Tyr Ala Lys His Trp His Ser Asp Ser Ala Gly Arg
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Leu Leu

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<212> PRT

<213> Homo sapiens

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<222> (1)..(165)

<223> X = any amino acid or a stop codon

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 20 25 30

Lys Ile Ile Trp Met Asp Cys Gly Ile His Ala Arg Glu Trp Ile Ala
 35 40 45

Pro Ala Phe Cys Gln Trp Phe Val Lys Glu Ile Leu Gln Asn His Lys
 50 55 60

Asp Asn Ser Arg Ile Arg Lys Leu Leu Met Asn Leu Asp Phe Tyr Val
 65 70 75 80

Leu Pro Val Leu Asn Ile Asp Gly Tyr Ile Tyr Thr Trp Thr Thr Asp
 85 90 95

Arg Leu Trp Arg Lys Ser Arg Ser Pro His Asn Asn Gly Thr Cys Phe
100 105 110
Gly Thr Asp Leu Asn Arg Asn Phe Asn Ala Ser Trp Cys Ser Ile Gly
115 120 125
Ala Ser Arg Asn Cys Gln Asp Gln Thr Phe Cys Gly Thr Gly Pro Val
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145 150 155 160
Asp Asp Phe Cys Ala
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<210> 20

<211> 324

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<213> bothrops jararaca

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Tyr Asn Tyr Glu Lys Tyr Asn Ser Trp Glu Lys Ile Asp Ala Trp Thr
35 40 45
Ala Asp Ile Ala Asn Glu Asn Pro Ser Leu Val Ser Arg Leu Gln Ile
50 55 60
Gly Thr Thr Phe Glu Gly Arg Pro Met Pro Leu Leu Lys Val Gly Lys
65 70 75 80
Pro Gly Val Asn Lys Lys Ala Ile Phe Ile Asp Cys Gly Phe His Ala
85 90 95
Arg Glu Trp Ile Ser Pro Ala Phe Cys Gln Trp Phe Val Arg Glu Ala
100 105 110
Val Arg Thr Tyr Gly Lys Glu Thr Ile Met Thr Gln Leu Leu Asn Lys
115 120 125
Leu Asp Phe Tyr Ile Leu Pro Val Leu Asn Ile Asp Gly Tyr Val Tyr
130 135 140
Ser Trp Lys Gln Ser Arg Met Trp Arg Lys Thr Arg Ser Val Asn Ala
145 150 155 160

Gly Ser Thr Cys Ile Gly Thr Asp Pro Asn Arg Asn Phe Asp Ala Ala
 165 170 175
 Trp Cys Ser Val Gly Ala Ser Arg Asn Pro Cys Ser Glu Thr Tyr Cys
 180 185 190
 Gly Ser Lys Pro Glu Ser Glu Lys Glu Thr Lys Ala Leu Ala Asp Phe
 195 200 205
 Ile Arg Arg Asn Arg Ser Ile Ile Gln Ala Tyr Leu Thr Ile His Ser
 210 215 220
 Tyr Ser Gln Met Leu Leu Tyr Pro Tyr Ser Tyr Thr Tyr Asp Leu Thr
 225 230 235 240
 Ser Asn Asn Lys Lys Leu Asn Ser Ile Ala Lys Glu Ala Ile Arg Glu
 245 250 255
 Leu Lys Val Leu Phe Gly Thr Glu Tyr Thr Tyr Gly Pro Gly Ala Ala
 260 265 270
 Thr Ile Tyr Pro Ala Ala Gly Gly Ser Asp Asp Trp Ala Tyr Asp Gln
 275 280 285
 Gly Ile Lys Tyr Ala Phe Thr Phe Glu Leu Arg Asp Lys Gly Arg Tyr
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 Gly Phe Ala Leu Pro Glu Ser Gln Ile Lys Pro Thr Cys Glu Glu Thr
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 Met Ile Ala Val

<210> 21

<211> 311

<212> PRT

<213> homo sapiens

<400> 21

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 Gly Thr Thr Phe Glu Gly Arg Ala Ile Tyr Leu Leu Lys Val Gly Lys
 35 40 45
 Ala Gly Gln Asn Lys Pro Ala Ile Phe Met Asp Cys Gly Phe His Ala

50					55					60					
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Val	Arg	Thr	Tyr	Gly	Arg	Glu	Ile	Gln	Val	Thr	Glu	Leu	Leu	Asp	Lys
				85					90					95	
Leu	Asp	Phe	Tyr	Val	Leu	Pro	Val	Leu	Asn	Ile	Asp	Gly	Tyr	Ile	Tyr
			100					105					110		
Thr	Trp	Thr	Lys	Ser	Arg	Phe	Trp	Arg	Lys	Thr	Arg	Ser	Thr	His	Thr
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Gly	Ser	Ser	Cys	Ile	Gly	Thr	Asp	Pro	Asn	Arg	Asn	Phe	Asp	Ala	Gly
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Trp	Cys	Glu	Ile	Gly	Ala	Ser	Arg	Asn	Pro	Cys	Asp	Glu	Thr	Tyr	Cys
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Gly	Pro	Ala	Ala	Glu	Ser	Glu	Lys	Glu	Thr	Lys	Ala	Leu	Ala	Asp	Phe
				165					170					175	
Ile	Arg	Asn	Lys	Leu	Ser	Ser	Ile	Lys	Ala	Tyr	Leu	Thr	Ile	His	Ser
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Tyr	Ser	Gln	Met	Met	Ile	Tyr	Pro	Tyr	Ser	Tyr	Ala	Tyr	Lys	Leu	Gly
		195					200					205			
Glu	Asn	Asn	Ala	Glu	Leu	Asn	Ala	Leu	Ala	Lys	Ala	Thr	Val	Lys	Glu
	210					215					220				
Leu	Ala	Ser	Leu	His	Gly	Thr	Lys	Tyr	Thr	Tyr	Gly	Pro	Gly	Ala	Thr
225					230					235					240
Thr	Ile	Tyr	Pro	Ala	Ala	Gly	Asn	Ser	Arg	Asp	Trp	Ala	Tyr	Asp	Gln
				245					250					255	
Gly	Ile	Arg	Tyr	Ser	Phe	Thr	Phe	Glu	Leu	Arg	Asp	Thr	Gly	Arg	Tyr
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Gly	Phe	Leu	Leu	Pro	Glu	Ser	Gln	Ile	Arg	Ala	Thr	Cys	Glu	Glu	Thr
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Phe	Leu	Ala	Ile	Lys	Tyr	Val	Ala	Ser	Tyr	Val	Leu	Glu	His	Leu	Tyr
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<212> PRT

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<223> X=any amino acid

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